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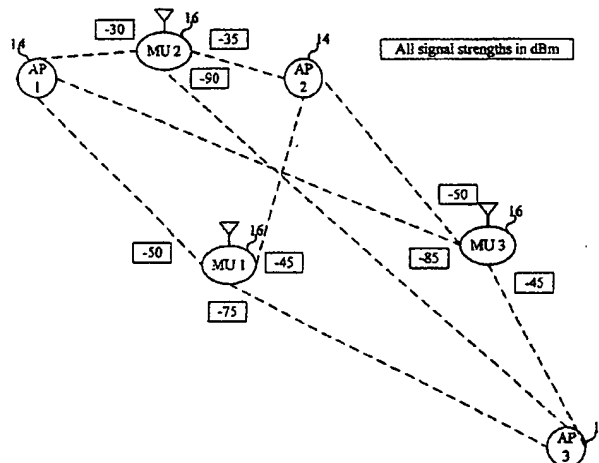
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[Continued on next page]

(54) Title: CHANNEL, CODING AND POWER MANAGEMENT FOR WIRELESS LOCAL AREA NETWORKS



Mobile Unit Signal Strength Measurements

(57) Abstract: A system and method are disclosed for the management of WLANs in cases where unmanaged access points are present as well as with the addition or removal of access points (14). The disclosed system and method use signal data and network traffic statistics collected by mobile units (16) to determine optimal configuration settings for the access points (14). The access point settings so managed can include the operating channel or center frequency, orthogonal signal coding used (optionally including the data rate), if any, and the transmission power. The solutions computed can account for the inherent trade-offs between wireless network coverage area and mutual interference that may arise when two or more access points use the same or overlapping frequency bands or channels and the same or similar signal coding.

WO 2004/073243 A3



— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

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**A. CLASSIFICATION OF SUBJECT MATTER**IPC(7) : H04Q 7/20; H04M 1/00; H04B 1/38  
US CL : 455/450, 452.2, 552.1, 571, 161.3, 500

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 455/450, 452.2, 552.1, 571, 161.3, 500

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X, P	US 2004/0082327 A1 (KIM et al) 29 April 2004 (29.04.2004), column 1 lines 0013-0015.	1-25
Y, P	US 2002/0085719 A1 (CROSBIE) 04 July 2002 (04.07.2002), column 1 lines 0006-0022.	1-25
A	US 2004/0137915 A1 (DIENER et al) 15 July 2004 (15.07.2004), column 2 lines 0031-0033.	1-25

☐ Further documents are listed in the continuation of Box C.☐ See parent family annex.

## \* Special categories of cited documents:

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